



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,656	03/23/2004	Seiji Terazawa	2271/60963-B	3983

7590 02/09/2006

Ivan S. Kavrukov  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, NY 10036

EXAMINER
----------

BEATTY, ROBERT B

ART UNIT	PAPER NUMBER
----------	--------------

2852

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/806,656

Applicant(s)

TERAZAWA ET AL.

Examiner

Robert Beatty

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 166-191 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 166-174, 180-182, 185 and 189-191 is/are rejected.  
7) ☒ Claim(s) 175-179, 183, 184 and 186-188 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 09/465,674.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 166,168-169,171-174,180,190 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yabaneta (JP# 06-175490) in view of Komuro et al.

Yabaneta teach a developing apparatus 6 and a toner container 11 located above. A air suction pump 12 will pump air into the toner container via conduit 16 and suck air out from conduit 17. Therefore, toner can be drawn out via a toner

conduit 17 and into a collection well (see Fig. 3 and 6. A trap door 32 will dispense the toner into the developing apparatus. The toner container has an outlet having a mating portion 37 for mating with the image forming apparatus. The mating portion comprises a tubular body 39 covered by an aluminum foil member 38 and further containing a foam seal 40 and a gasket 45. The toner container has an inlet 47 acting as a mating portion for the air conduit. Specifically, Yabaneta teach everything claimed except an air filter window located on one of the walls of the toner container.

Komuro et al. teach a toner delivery system comprising a developing device having toner receptacles 320 (Fig.2) and 330 (Fig.5) having air filter windows 321, 332 respectively. An air pump 532 sends air through a conduit 400 and into the toner receptacles 320, 330 so as to drive toner from the cleaning station toward the developing device. The air filter window equalize the pressure inside the receptacles. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yabaneta so as to have an air filter window on the toner container (toner receptacle) because air can be equalized within the container and therefore air currents throughout the developing device/image forming system can be prevented.

2. Claims 167 and 191 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yabaneta (JP# 06-175490) in view of Komuro et al. as taught in claims 166,168-169,171-174,180,190 above and further in view of Ichikawa et al.

Yabaneta and Komuro taught supra discloses most of what is claimed the packing density of the toner within the container being less than  $0.7 \text{ g/cm}^3$ . Ichikawa et al. teach a toner container that typically have packing densities of about  $0.3 \text{ g/cm}^3$  to  $0.36 \text{ g/cm}^3$  (col.1, lines 34-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made that toner cartridges would typically be packed with toner below  $0.7 \text{ g/cm}^3$  because this is very well known procedure in the art and would allow for using an easy and efficient auger packing method.

3. Claims 170,181-182,185,189 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yabaneta (JP# 06-175490) in view of Komuro et al. as applied to claims 166,168-169,171-174,180,190 above and further in view of Kitajima (JP# 03-241372).

The combination of Yabaneta and Komuro et al. taught supra discloses most of what is claimed except the toner container being flexible/deformable. Kitajima teach a toner container 40 made from a flexible material 41a. It would have been obvious to one of ordinary skill in the art at the time the invention was made to


Art Unit: 2852

modify the toner container to be flexible because prevention of scattering of toner and a reduction of cost can be obtained as taught in Kitajima.

4. Claims 175-179, 183-184, 186-188 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Beatty whose telephone number is (571) 272-2130. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley, can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.



Robert Beatty  
Primary Examiner  
Art Unit 2852